

PRACTICAL REMARKS
ON
DISEASE OF THE HEART,
AND THE
DROPSY FOLLOWING IT.

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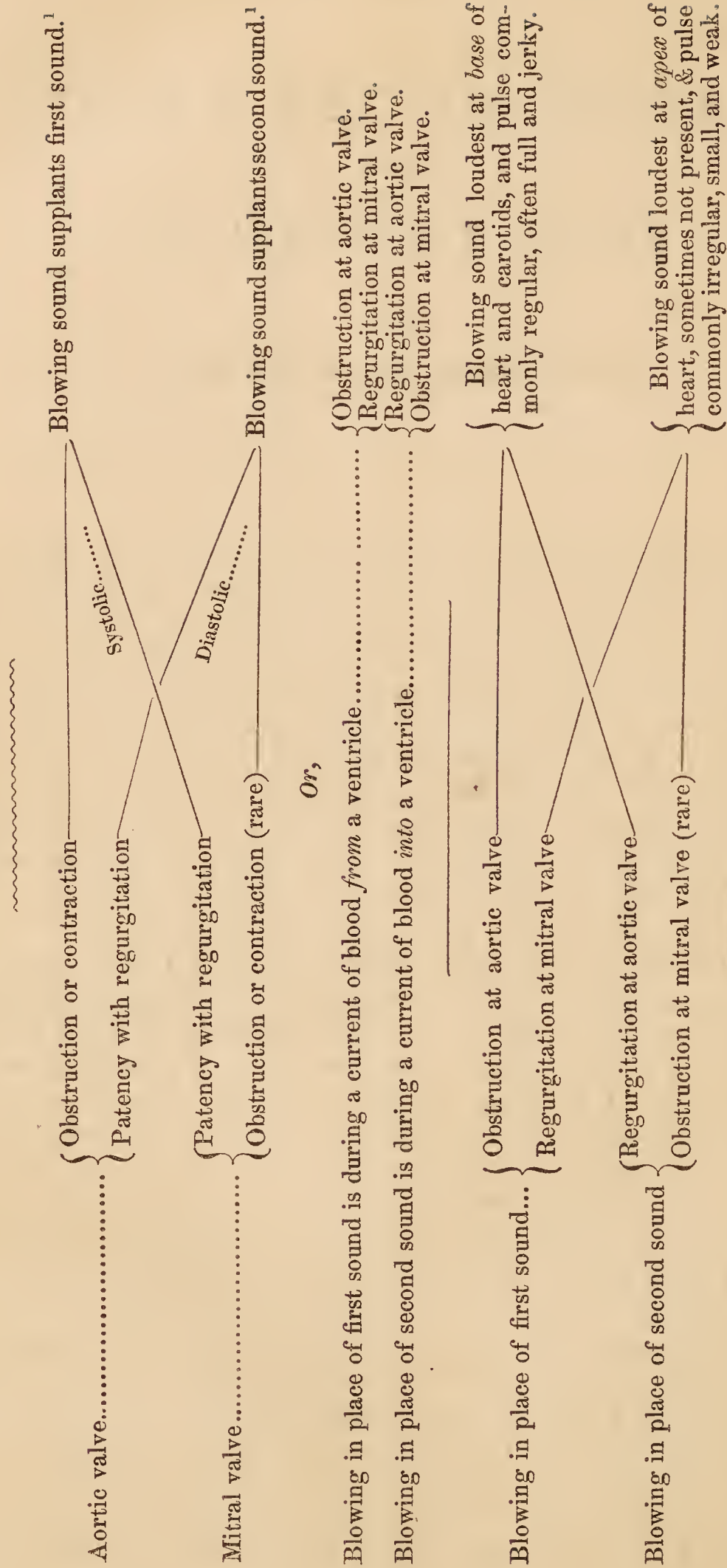
[FROM THE MONTHLY JOURNAL OF MEDICAL SCIENCE, FOR SEPTEMBER 1850.]

IN the thirty-third Number of this Journal, or that for September 1843, I published some short "Notes on Diseases of the Heart," in which I stated as the result of my experience—but submitting my opinion with every deference to that of others—that the "*bruit de soufflet*" is of value as a sign to us, when permanently present, that disease does exist *somewhere* in the heart, pericardium, or large vessels, but that it is no sure guide to the special site of the lesion.

It was my conviction that authors, and particularly young authors, who meditated much on their cases at home, and were so ready to explain everything on mechanical principles, were apt to refine a little too much, and lay too great stress on a diagnosis from the abnormal sounds, call them by what name they may, alone.

Nearly seven years' longer experience, in which I have seen many additional cases of heart disease in hospital and private practice, has not brought me to materially alter that opinion. I allow that we may often make a pretty good *guess* as to the seat of the disease, but that is nearly all. "Guesses at truth," however, are often interesting and even instructive; and as an easy mode of impressing on my students in the clinical class the usual views, or guesses, as to the seat of the morbid sounds of the heart, and probable condition of the parts causing them, I have been in the way of exhibiting the following diagram. I have reason to think it has been convenient, for I have been applied to for copies of it by several of my medical brethren. There are not many—few, perhaps, but those who make heart disease their hobby in their closets or in practice—that can always carry in their minds, or bring to their recollection, the seats and causes of the abnormal sounds of the heart as given by the writers on these diseases; but a copy of this diagram, which can be easily made on a slip of paper, and carried in the pocket-book, will at a glance give the practitioner the information which has passed from his memory.

DIAGRAM OF MORBID SOUNDS OF THE HEART.



Purring tremor (*fremissement*) is *felt* sometimes, in disease of the valves, by the hand laid over the heart.
 Purring sound (*frottement*), or creaking, or see-sawing sound, is heard in disease of the pericardium.

¹ Similar sounds arise from disease of the corresponding valves of the right side; but disease of the left is twenty times more frequent than of the right.

It will be observed that the second form of the diagram is merely another way, so to speak, of stating the same thing as in the first one. But the third is essentially different in its object, having reference to another sign than that depending upon the sounds. Perhaps some will object to the indications derived from the pulse, as not being deserving of so much importance as I am inclined here to attribute to them. I give them, however, only as farther aids to our guesses as to the true seat of the disease; and I must say, for my own part, that, having satisfied myself by my ear, and by such signs and symptoms from the condition of other organs as I can get, that heart disease does exist, I rely more on the state of the pulse than on anything else as a guide to the exact seat of the lesion.

When so much has been written on the treatment of the diseases of the heart, it may be something like going over a more than twice-told tale to offer any remarks on that subject. I shall, however, be brief, and the want of novelty will perhaps be atoned for by the fact, that I speak from the results of considerable experience, and that I offer these observations to the young practitioner chiefly.

If any one were to ask me, "What can you do to cure disease of the heart?"—I would honestly answer at once, "Nothing." But if any one were to ask, "What can you do to ward off the symptoms or feelings that too often become concomitants of that disease?"—I would say that, next to quietness of mind and body, and equable temperature, and moderate or rather low living, I know nothing equal to the use of small doses of colchicum wine, weak saline purges, and inserting a seton over the region of the heart. It will not do to trust to these when the severe sequelæ of heart disease—distressing dyspnœa, hæmoptysis, or dropsy—have more than once occurred; but I know no means equal to them in warding off these latter. I could mention several instances where this treatment has proved most beneficial. One case has been repeatedly under my notice. It was a female, a servant, past the middle period of life, who applied first for a slight attack of anasarca, arising from heart disease. The effusion was soon removed, and she was sent out of hospital with a seton in the side. She kept it open for some time; but, thinking herself well, withdrew it. In a few days after she returned, begging that it might be re-opened,—which was done; and painful experience has more than once taught this woman, in the course of eight years, the necessity of keeping up a discharge from a seton, renewed when necessary, and aiding its influence by the occasional use of the above medicines.

It has often been doubted whether blood should be abstracted in cases of advanced heart disease in elderly persons, when labouring under a sudden paroxysm of violent dyspnœa, giving the feeling of almost immediate suffocation. No doubt, mustard poultices over the heart, and the immersion of the feet and legs in hot water holding some mustard in it, will give some relief; but no means will be

found equal to abstracting a small quantity—from two to four ounces—of blood from the arm.

In the treatment of cardiac dropsy, every practitioner has his favourite remedy, taken from the class chiefly of diuretics or purgatives, or both. Of the former, I have found the following combination the most efficient. It pumps the patient out, so to speak, sometimes in a few hours; and it often will do so in repeated attacks of the anasarca.

R Infusi Digitalis, ℥iv. Acetatis Potassæ, ℥ij. Spiritus Ætheris Nitrosi, ℥ij. Aquæ Cassiæ, ℥iss. Capiat cochleare magnum quartâ quâque horâ.

At last there comes an attack in which this and other diuretics cease to act, and we must then fall back on purgatives. Of the latter, unquestionably the most powerful is elaterium. But there surely must be a very great diversity in the strength of this medicine. Some practitioners, from the days of Sydenham, and long before him, downwards, appear to have given it in the dose of two grains, or even more; but I have found a single pill, according to the following formula, generally very powerful:—

R Elaterii, gr. j. Extracti Colocynthis Comp., ℥ij. ss. Extracti Hyoscyami, gr. xij. M. Divide in pilulas xij. Capiat unam nocte manequæ.

The great objection to the elaterium is the intense sickness, even in this small dose, produced by it. Do the large doses produce less sickness than the smaller? It may be so; but, in the few instances in which I have tried large doses, the sickness was not less. Is there any mode by which this sickening property in this valuable medicine could be removed? The same effect was found by the ancients in the well-known and much-used, but undeservedly now almost discarded, hellebore; and for the sickness occasioned by it we find it recommended (*vide* “Oribasius,” lib. viii., cap. v.) that, amongst other remedies, the patient should be entertained with a funny little story, or be tossed, like Sancho Panza, in a blanket.¹ Something more efficient than the former, and less disturbing than the latter, would be a desideratum.

It is the opinion of some that the elaterium acts as a diuretic, as well as a hydragogue cathartic. I remember, when in consultation with Dr Adams, of Banbury, in a case of cardiac dropsy, having my attention called by him to a formula, where the elaterium was combined with a diuretic, which he had seen prescribed with very great success. I detected it at once as a formula given in Ferriar’s valuable “Medical Histories.” It acts most powerfully by stool and urine (being composed of several of the most powerful of the diu-

¹ My learned friend, the translator of Hippocrates and Paulus Ægineta, writes, in a note, in his translation of the latter, “shaken in a garment;” but mine, I assert, is the more spirited version.

retics, along with the elaterium); but I always found it to cause much and violent sickness.

℞ Extracti Elaterii, gr. ij. Spiritus Ætheris Nitrosi, ℥ij. Tincturæ Scillæ. Oxymellis Colchici, āā ℥ss. Syrupi Rhamni, ℥i. M. Ft. Solutio. Capiat drachmam unam ex aquæ pauxillo, ter, quarterve in die.

The combination of a bitter purgative with a saline one composed of the vegetable alkali and a vegetable acid, is in my experience much more efficient than any single purgative, or than a bitter with a salt formed of a mineral acid. The old compound powder of jalap is a well-known instance of a mixture of this kind, and is still one of our best purgatives in all dropsies where this class of medicines may be suitable. Ferriar used, as did also Home, a combination of half an ounce of the bitartrate of potass with two grains of gamboge. The infusion of senna with bitartrate of potass is also an old-fashioned and valuable remedy; but the insolubility of the salt is an impediment to the efficiency of this formula. The senna infusion with tartrate of potass, or with the tartrate of potass and soda, is not liable to the same objection; and the advantage of the frequent use of this combination in cardiac disease having a tendency to dropsy, or in the dropsy itself attending that complaint, has been in my hands, and those of my brethren to whom I have recommended it, so unequivocal, that I can speak for it in the highest terms.

The preparations of mercury have proven, no doubt, very successful in the treatment of this form of dropsy, and consequently many practitioners give them a preference. Without wishing at all to detract from the merits of this most valuable agent, I must confess that, in chronic diseases of the heart, I have the same objection to it, and founded on the same grounds, as was that to the celebrated Dr Fell, or, to use the more classic words of Martial,—

“Non amo te, Sabidi, nec possum dicere quare;
Hoc tantum possum dicere, non amo te.”

I do not like the mercury, and cannot speak from experience of its efficacy in cardiac dropsy.

There comes a time in the treatment of this complaint when not only diuretics in all forms, but even purgatives, cease to remove or even to keep in check the anasarca. And this brings me to speak of another mode of treatment, which often proves palliative for a time,—viz., puncturing the lower extremities, and thereby draining off the fluid.

This is not a new mode of treating the disease, though it has at various times fallen into unmerited neglect, and perhaps at the present time more so than at any other. Freind, in his “*Historia Medicinæ*,” refers to the passage in *Ætius* which treats of this method of curing dropsy. *Ætius* is quoting from *Asclepiades*, and says that “an incision is to be made in the internal part of the leg, about four fingers’ breadth above the ankle, and that it is to be of the same depth as in venesection. A small quantity of blood flows

first, and then there is a continuous discharge of water; and, without inflammation, the wound remains open until the whole dropsy has run off, no internal medicine being used." Freind continues, "Ipsa operatio ab Hippocrate memoratur, et ab ejus temporibus usque ad hunc diem multo sæpe cum successu adhibita est. Aliam puncturæ, scilicet per acum, viam proponit Sylvius de la Boe, hanc a se primo excogitatam glorians; quanquam evidens sit ea omnia ex hac descriptione desumpta esse, atque totidem verbis ab Avicenna expressa." And then he adds, "Verum haud sola hæc inventio recens dicitur, quam antiqui nobis medicinæ scriptores diserte tradiderint. Id autem omnibus in chirurgia vel minimum versatis constat, lanceolam longe præferendam esse cuivis acui, in aperiendis iis, quæ anasarcam comitantur, tumoribus."—"Historia Medicinæ," p. 385: Lond., 1733.) Mead commences his notice of the treatment of dropsy ("Monita," p. 130: Lond., 1771) with an account of this operation. He directs an incision to be made, two fingers' breadth above the ankle, down to the cellular membrane, and no further; and he orders the leg to be fomented with a decoction of emollient herbs, to which some spirits of wine and camphor have been added. He tells us that he has often found this mode of treatment, not only in this disease (anasarca), but also in ascites, of great service, and sometimes curative, the water running out for many days to an extent to exceed all belief. He carefully cautions us to support the patient's strength under a serous discharge from this or any other wound. He then gives a case, apparently hopeless, of anasarca, combined with ascites, where, by a wound made in this manner in each leg, followed by a combination of bitters, squills, and such purgatives as elaterium, calomel, and jalap, the patient recovered, and died five years afterwards of another disease.

This method of treatment is also brought under our notice by Heberden, in his "Commentaries," but not with so flattering hopes of advantage. He says,—“When these and other diuretics have failed, as is often the case, some have attempted to draw off the water by incisions in the legs, and even by cantharides blisters applied to them; and sometimes blisters take place spontaneously on the legs of dropsical persons. By these means,” he continues, “I have seen not a small quantity of water drawn off, but never the disease cured (‘morbum autem nunquam sanatum’);—but they gave a brief respite, and eased the patient a little.” He then notices the great objection to this mode of treatment—the difficulty of healing, and the danger of these wounds,—“Odiosum est quod hæc vulnuscula interdum fiunt ulcera sanatu difficilia, vel periculosa, quanquam bis aut ter quotidie pannis laneis ex aqua calida expressis foveantur. Fomenta hæc utilia sunt ad aquam copiosius evocandam.”—"Commentarii," p. 191: Londini, 1807.)

I have here quoted the opinions of these very practical men as a test, so far, of the value of the treatment by incisions and puncture.

I have no hesitation in saying, with both Mead and Heberden, that I have not only often seen it of great benefit to a patient labouring under anasarca, no matter what the pathological cause of that disease, but have also in some cases seen it prove a cure, or, at any rate, that, after recourse had to it, internal medicines, which previously exerted no effect on the dropsical effusion, began to act, and the anasarca did not reappear.

I do not, however, recommend it until all internal remedies have failed. I never have recourse to it till it has become, to use Mead's expression, "*unica spes salutis*;" and I do not forget the qualification he makes, "*et ea dubia*." Still I am decidedly of opinion that, whether as a palliative or as a hope of cure, it deserves more notice than now-a-days it seems to me to get.

There are two modes, as stated above, in which the opening for draining off the fluid may be made,—either a puncture with the lancet, or with a good stout sewing needle. From a single puncture by the latter, a quantity of water will sometimes run out so as to pass through the bed in a few hours, and require to be collected in vessels placed below it.

Heberden has evidently seen the danger attending this mode of treatment, though he does not say specifically in what it lies. He tells that the wounds are difficult to be healed: but that we need not fear. He also says they are "*periculosa*." Now, the danger consists in the inflammation of an erysipelatous character, that not unfrequently takes place, extending up the limb, sometimes bringing on *sphacelation*, and for the most part ending in the death of the patient. But if the medical attendant would be satisfied with one incision, and one, or at the most two, punctures, in the proper place, erysipelas is not so apt to occur. The state of the skin—its low vitality during the existence of the dropsy under it—is singularly favourable for this form of inflammation; but a small clean cut, or one or two punctures,—and, if there be two, at a distance of not less than two inches from each other,—is not so likely to be followed by this as when, in the anxiety to get the water all off speedily, several have been made. The writers whom I have quoted all recommend fomentations to be applied to the wound; but I have often found the evaporating lotion very successful in keeping down any disposition in the part to erysipelas. Frequent ablution also, with tepid water, and the removal of any cloths that may be soaked with the serum that has run out, will serve to prevent, so far, any irritation from being set up in the skin.

When the operation, even with the needle, has to be often repeated, as is sometimes the case, for the ease of the patient, especially in cardiac dropsy, there is sometimes a degree of inflammatory action set up in the cellular tissue by which its interstices become obliterated, and the skin and it become quite closely adherent to the fascia below. I remember this occurring in a gentleman, who had been kept alive for some months by punctures, and who was at last

dropsical everywhere, except below the knees, where the adherent and thickened integuments would not distend,—thus giving him, however, not a little pain. It has of late been recommended to have recourse to this treatment much earlier in the disease than was the custom with the old practitioners; and it has been said that the chances of success from it are much greater than when the patient's strength has been exhausted, and the vitality of the skin has been impaired by the long existence of a dropsical effusion. This reasoning is fair; but, whilst admitting it, one practical point may be mentioned, which is, that the fluid does not flow so freely from the incisions as when the areolar tissue has become more open and less resilient by the long existent pressure of the effused serum. And, little as the danger of erysipelatous attacks may be from puncture of the skin in the early stage of anasarca, still there are few that will subject the patient to this chance of danger until all the other more usual and often successful modes of treatment have been tried in vain.

As to another topical means of treatment in this disease—viz., the application of blisters to the anasarcaous legs, with the view of draining off the serum—I would have scarcely thought it necessary to speak, believing that almost none, now-a-days, would adopt this practice; but lately I met a very intelligent country practitioner, who told me that he occasionally had recourse to this application. Sydenham has condemned the practice, and branded it as a favourite application of empirics; and he states that “blisters entirely extinguish the natural heat, already almost overpowered by the water and deficiency of the animal spirits, and bring on a gangrene—too common in such cases.” Sydenham's authority (and, by the way, he also condemns acupuncture) is great; but I have seen a small vesicle, which had formed on one of the lower limbs, burst and drain off the whole serum from a person affected with extensive anasarca. The case alluded to is one of interest otherwise, though more properly suited to an Article on renal dropsy. The patient, a lady, had the most albuminous urine I ever examined. Every remedy for dropsy had been tried by her medical attendant but mercury, and it was only left to me to suggest that, before the patient died, this medicine, which I had never seen more dangerous in this form of dropsy, as has been asserted by writers, than in any other, should be cautiously tried. This was done. Two days afterwards the vesicle above alluded to showed itself and burst, and our patient, much to our surprise, recovered, and is still in good health,—seven years after the above attack. What nature does may not always be successful in the hands of art; and the exciting of a vesication, by means of a blister, is much more likely to be followed by dangerous, than by curative, effects in all anasarcaous limbs, from whatever cause the dropsical effusion may have arisen.